

REMARKS

Claim 1 is amended herein to include those impregnated salts with particle sizes in the range of 10  $\mu\text{m}$  to 2000  $\mu\text{m}$ . This new element of the claim is supported by the specification at page 5, lines 14-18.

REJECTION UNDER 35 USC §103(A)

The present claims are obvious over none of the references cited by the examiner, i.e., van Ooijen (EP 0 608 975), Gonthier et al. (US 3,600,198), or Kotani et al. (US 4,122,187). To establish *prima facie* obviousness, the examiner must show in the prior art a teaching or suggestion of each claim element, some suggestion or motivation to make the claimed invention, and a reasonable expectation for success in doing so (see, e.g., *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986); *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)).

The van Ooijen disclosure makes no reference to the size of the salt particles produced therein, and makes no suggestion to limit the salts in this way. Accordingly, no *prima facie* case of obviousness has been established based on this reference.

In Gonthier, the composition produced is a mixture of two buffered solutions, and is not an impregnated salt (see, e.g., col.1:52-55). The examiner points to no language therein suggesting that the "buffered mixture[s]" are solidified or might be solidified. Thus, *prima facie* obviousness is not established.

Kotani requires a mixture of sorbic acid "or a double salt thereof" (abstract). A "double salt" of sorbic acid is a composition having *sorbic acid* and a salt, for example, a sodium or potassium salt of sorbic acid, succinic acid, citric acid, tartaric acid, propionic acid, or acetic acid, etc. (col.2:46-50). Sorbic acid is required in the Kotani composition, and is not included among the carboxylic acids which may be used in the presently claimed invention. The examiner has not set forward any suggestion or evidence that would motivate one of skill in the art to remove sorbic acid from the invention of Kotani. Further, as the claims of Kotani are directed to a "sorbic acid composition," removing sorbic acid from that composition would make the invention unfit for the purposes to which it is intended.

Applicants respectfully submit that the disclosures in the above-named references do not given one of ordinary skill in the art sufficient motivation or possibility for success in producing the presently claimed invention. Accordingly, applicants respectfully request that the examiner withdraw the rejection of claims 1-2, 4-19 and 21 under 35 USC §103(a).

#### CONCLUSION

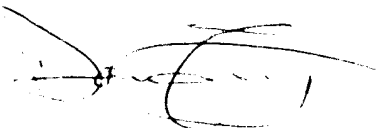
In view of the foregoing amendments and remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

**A check in the amount of \$110.00 is attached to cover the required one month extension fee.**

BROECKEL et al., Serial No. 09/487,000

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,  
KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'David C. Liechty', with a large, stylized flourish extending to the right.

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS**

Please amend claim 1 to read as follows:

1. Impregnated salts with a particle size of 10  $\mu\text{m}$  to 2000  $\mu\text{m}$  comprising at least one salt of one or more carboxylic acids, selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, oxo acids and mineral acids, which salt has been impregnated with from 0.5 to 30% by weight, based on the carboxylic acid salt, of at least one carboxylic acid that is liquid or becomes liquid at a temperature of 40°C or below, also selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, hydroxy carboxylic acids, oxo acids and mineral acids.

**COPY OF ALL CLAIMS**

1. Impregnated salts with a particle size of 10  $\mu\text{m}$  to 2000  $\mu\text{m}$  comprising at least one salt of one or more carboxylic acids, selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, oxo acids and mineral acids, which salt has been impregnated with from 0.5 to 30% by weight, based on the carboxylic acid salt, of at least one carboxylic acid that is liquid or becomes liquid at a temperature of 40°C or below, also selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, hydroxy carboxylic acids, oxo acids and mineral acids.
2. Impregnated salts as claimed in claim 1, comprising at least one salt of a carboxylic acid selected from the group consisting of formic acid, acetic acid and propionic acid, which salt has been impregnated with at least one carboxylic acid, also selected from the group consisting of formic acid, acetic acid and propionic acid.
4. Impregnated salts as claimed in claim 1, where the carboxylic acids in the carboxylic acid salts and the carboxylic acid used for impregnating the salts are identical.
5. Impregnated salts as claimed in claim 1, wherein the impregnated salts comprise at least one salt selected from the group of ammonium, potassium, sodium, lithium, magnesium or calcium salts.
6. A preservative comprising an impregnated salt as claimed in claim 1.

7. A preservative as claimed in claim 6, additionally comprising a carrier.
8. A preservative as claimed in claim 6, which is coated with a protective agent which is soluble or swellable in water at 20°C.
9. A preservative as claimed in claim 6, wherein water-soluble polymers, organic acids, their salts or low-melting inorganic salts are used as protective agents.
10. A preservative as claimed in claim 6, further comprising a protective agent selected from the group consisting of polyethylene glycols, polyvinylpyrrolidones or C<sub>3</sub>-C<sub>14</sub> organic acids and their salts, and amino acids and their salts.
11. A preservative as claimed in claim 6, wherein a dusting powder is applied to the surface in addition to or in place of the protective agent.
12. A process for producing impregnated salts as claimed in claim 1, which comprises impregnating at least one salt of a carboxylic acid or of a mixture of carboxylic acids selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, oxo acids and mineral acids, with at least one carboxylic acid that is liquid or becomes liquid at a temperature of 40 °C or below and is also selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, hydroxy carboxylic acids, oxo acids and mineral acids, until the concentration is 30% by weight based on the carboxylic acid salt.
13. A process as claimed in claim 12, wherein at least one carboxylic acid is introduced into a mixer, and at least one salt of a carboxylic acid or of a mixture of carboxylic acids is metered in.

14. A process for producing a preservative, which comprises mixing impregnated salts as claimed in claim 1 with one or more carriers and/or formulation auxiliaries, and agglomerating with or without the addition of at least one binder.
15. A process as claimed in claim 14, wherein the preservative is coated with a protective agent which is soluble or swellable in water at 20°C and/or if required the flow characteristics of the preservative are ensured by dusting with a finely dispersed dusting powder.
16. A process for preserving human and animal food, wherein the impregnated salts as claimed in claim 1, or the preservatives are added to the human or animal food.
17. A preservative as claimed in claim 6, additionally comprising formulation auxiliaries.
18. A preservative as claimed in claim 10, wherein the protective agent is selected from the group consisting of C<sub>3</sub>-C<sub>6</sub> organic acids and their salts.
19. A preservative as claimed in claim 18, wherein the protective agent is selected from the group consisting of citric acid, fumaric acid, succinic acid, adipic acid, benzoic acid and their salts.
21. A process for acid treatment wherein the impregnated salts of claim 1 or the preservatives are introduced into or placed on an item to be treated.